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Mr. William Caton **Acting Secretary** Federal Communications Commission 1919 M Street, N.W. Washington, D.C. 20554

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FEDERAL COMMUNICATIONS COMMISSION OFFICE OF SECRETARY

December 16th, 1994

Re: ET Docket No. 94-32

Dear Mr. Caton:

Transmitted herewith are an original and nine (9) copies of the Comments of Western Multiplex Corporation in response to the above Notice of Proposed Rule Making by the Commission released on November 3th, 1994.

Please address any questions concerning this matter directly to the undersigned.

Very truly yours,

**Graham Barnes** 

Director of Marketing

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# Before the FEDERAL COMMUNICATIONS COMMISSION Washington, DC 20554

FEDERAL COMMUNICATIONS COMMISSI OFFICE OF SECRETARY

| In the Matter of             | )             |          |
|------------------------------|---------------|----------|
| Allocation of Spectrum Below | ) ET Docket N | o. 94-32 |
| 5 GHz Transferred from       | )             |          |
| Federal Government Use       | )             |          |

To: The Commission

# COMMENTS on NOTICE OF PROPOSED RULEMAKING by WESTERN MULTIPLEX CORPORATION

### I. INTRODUCTION

Pursuant to Sections 1.415 and 1.419 of the Commission's Rules, Western

Multiplex Corporation (WMC) hereby submits these comments on the Notice of Proposed

Rule Making (NPRM) for the allocation of 50 MHz of spectrum that is being transferred

immediately from Federal Government to private sector use as required by the Omnibus

Budget Reconciliation Act of 1993.

#### II. NO RULES IN NOTICE OF PROPOSED RULE MAKING

1. WMC notes that no specific rules or allocation proposals are contained in the NPRM, but that many of the possibilities and allocation approaches raised by the previous Notice of Inquiry (NOI) in this proceeding are being suggested for further discussion. WMC welcomes the opportunity to participate in this discussion and comment on what we hope are only suggestions at this stage.

## III. ALLOCATION APPROACH IN 2402 - 2417 MHz

- 1. WMC supports the allocation approach of this frequency band for flexible use with general fixed and mobile services and notes that this objective is currently being satisfied, to an extent that is greater than appears to be admitted by the NPRM, by existing (and future, planned) products operating under the existing Part 15 rules.
- 2. Therefore, WMC does NOT support the suggestion that auctions should be held to license the 2402 2417 MHz band in 1 2 MHz blocks in exclusive geographic areas. Exclusive licensing will result in driving out the majority of new emerging innovative products and services being planned in the 2400 2483.5 MHz ISM band under Part 15.247 rules. Exclusive licensing will result in significant potential interference situations between the very large number of existing users of Part 15 products in this band and the new service licensees which will require intervention by the FCC. Exclusive licensing will not be attractive to potential operators because of the difficulty of providing reliable service without clearing out the current incumbents which is a potentially risky task given the volume of unlicensed and nomadic products currently being used in the

band. And finally, replacing common use frequencies with exclusive licensing is not in the public interest - it is only in the special interest.

## IV. COMPATIBILITY BETWEEN LICENSED AND UNLICENSED SERVICES

- WMC notes that compatibility between licensed and unlicensed services is
  only an issue where there is an intent to share frequencies between these services.
   Compatibility is not an issue when there is an exclusive allocation to licensed services,
  because the unlicensed services will need to be removed for the licensed services to
  become exclusive.
- 2. The operation of unlicensed spread spectrum devices in the 2400 2483.5 MHz band on a secondary non-interfering manner under Part 15.247 rules with other secondary and primary services demonstrates that there is good compatibility between the current mix of services in the 2402 2417 MHz band and that compatibility should be possible with other new services in this band provided care and attention is taken in specifying the new services.
- 3. However, WMC does not believe that spread spectrum technology can provide compatibility with <u>all</u> other services and is particularly concerned that some licensed services may demand such high protection ratios that compatibility is compromised.
- 4. Further, a compatible licensed service would find it exceedingly difficult to compete economically with an unlicensed service because it could offer little in the way of

performance advantages while still being compatible, and yet must still pay the auction cost for the license.

5. WMC observes that because certain NOI commenters (such as GEC Plessey and UTC) have supported the reallocation of the 2402 - 2417 MHz band to private use for spread spectrum operation, that does not neccesarily mean that they prefer this reallocation to be for licensed services. In fact, WMC believes that there is generally greater support for maintaining this band for unlicensed services. However, despite this support, should the FCC determine that the need for federal revenues outweighs other considerations, then most commenters (WMC included) would rather see the spectrum allocated for licensed spread spectrum services similar to Part 15.247 rather than conventional licensed narrowband services.

#### V. CONTINUED USE OF 2400 - 2483.5 MHz BY PART 15 DESIREABLE

WMC continues to agree with a large number of commenters to the NOI (Interdigital, Part 15 Coallition, AT&T, Symbol Technologies, Itron, GEC Plessey, Southern Company, Apple and UTC) who explicitly supported the continuing use of the 2400 - 2483.5 MHz band by Part 15 devices. In order to ensure this continuing use, WMC believes that no part of this band should be reallocated to other services. The sharing of this band by other services is a completely different matter from reallocation to other services. Sharing may be acceptable or not, depending upon the rules developed for sharing, as noted above.

VI. NO PRIMARY USE OF 2400 - 2483.5 MHz DESIREABLE

1. Western Multiplex agrees with the many Amateur radio commenters that it

is not desireable to allocate any primary service in the band 2400 - 2483.5 MHz because

of the extensive use of this band, mainly by Part 15 and ISM devices. In fact, shared use

between Amateur service and commercial service is difficult and becomes impossible if

there is any licensed primary commercial service allocated.

2. Western Multiplex does not agree that unlicensed Part 15 use should be

coordinated with Amateur users because both services are operating on an established

secondary basis where the desireability of rapid deployment and mobility is essential.

V. **CONCLUSION** 

In summary, WMC does not support any suggestion to remove Part 15 from the

2402 - 2417 MHz band. Because of the real difficulties involved in implementing a

licensed service in the 2402 - 2417 MHz band, WMC proposes that the 2402 - 2417 MHz

band be retained for unlicensed services, including Part 15.

Respectfully submitted,

WESTERN MULTIPLEX CORPORATION

Date: December 16th, 1994

Graham R. Barnes

Director of Marketing

Western Multiplex Corporation

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5